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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/856,969 | 08/01/2001 | Chantal Cayuela | 33339/234602 | 5142 |

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EXAMINER

HINES, JANA A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1645

DATE MAILED: 12/11/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/856,969

Applicant(s)

CAYUELA ET AL.

Examiner

Ja-Na Hines

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Amendment Entry

1. The amendment and response filed on May 23, 2003 and September 23, 2003 have been entered. Claims 1-6, and 10-12 have been amended. Claims 13-20 have been cancelled.

2. This application contains claims 7-9 are which have been withdrawn from consideration. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01. Claims 1-6 and 10-12 are under consideration in the office action.

Drawings

3. The drawings filed May 23, 2003 are acceptable.

Withdrawal of Rejections

4. The following rejections have been withdrawn in view of applicants' amendments:
- a) The nonstatutory double patenting rejection of claims 1-6;
 - b) The rejection of claims 1-6 and 10-20 under 35 U.S.C. 112, second paragraph;
 - c) The rejection of claims 1-6 and 10-20 under 35 U.S.C. 102(b); and
 - d) The rejection of claims 1-2, 5 and 10-12 under 35 U.S.C. 102(b).

Response to Arguments

5. Applicant's arguments with respect to claim 1-6 and 10-12 have been considered but are moot in view of the new ground(s) of rejection.

New Grounds of Rejection

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-6 and 10-12 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method for in vitro regulation of the inflammatory response of enterocytes, said method comprising contacting said enterocytes with a composition containing as an active agent a lactic acid bacteria strain *L. casei* CNCM I-1518 in a dose dependant manner, being capable of decreasing the production of Nitric Oxide (NO) by cultures of enterocytes preactivated with Cytomix combination of pro-inflammatory cytokines and bacterial lipopolysaccharide (LPS) on colon carcinoma cell lines does not reasonably provide enablement for a method for regulating of the inflammatory response of enterocytes, said method comprising contacting said enterocytes with a composition containing as an active agent a lactic acid bacteria strain being capable of decreasing the production of Nitric Oxide (NO) by cultures of enterocytes preactivated with pro-inflammatory cytokines and bacterial lipopolysaccharide (LPS). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make or use the invention commensurate in scope with these claims.

The newly amended claims are drawn to a method for regulating of the inflammatory response of enterocytes, said method comprising contacting said

enterocytes with a composition containing as an active agent a lactic acid bacteria strain being capable of decreasing the production of Nitric Oxide (NO) by cultures of enterocytes preactivated with pro-inflammatory cytokines and bacterial lipopolysaccharide (LPS).

The specification teaches at page 10 and Figure 4 teach that when the carcinoma cell lines were preactivated with cytomix and bacterial LPS, *L. casei* CNCM I-1518 reduces the production of NO in a dose dependant manner. Cytomix is at least the combination of human cytokines: interleukin- β (IL-1 β), Tumor Necrosis Factor- α (TNF- α) and interferon- γ (IFN- γ). See page 6 lines 6-10. It is well known that the combination of stimuli are often required to induce the *in vitro* production of NO, and that the action of single agents fails to activate the cells. Therefore, only the precise combination of human pro-inflammatory cytokines will preactivate the enterocytes, as opposed to other cytokine agents.

The specification fails to teach examples of a method that meet the limitations of the claims in the manner instantly claimed. Therefore, the specification fails to enable a method for regulating of the inflammatory response of enterocytes, said method comprising contacting said enterocytes with a composition containing as an active agent a lactic acid bacteria strain being capable of decreasing the production of Nitric Oxide (NO) by cultures of enterocytes preactivated with pro-inflammatory cytokines and bacterial lipopolysaccharide (LPS). Moreover, the example shows *in vitro* methods for regulating the inflammatory response of enterocytes, by contacting said enterocytes with a composition containing as an active agent a lactic acid bacteria strain being

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capable of decreasing the production of Nitric Oxide (NO) by cultures of enterocytes preactivated with pro-inflammatory cytokines and bacterial lipopolysaccharide (LPS). There are no *in vivo* or *in situ* method disclosed, therefore only an *in vitro* method for regulation is enabled by the specification.

Applicants' have provided no guidance to enable one of ordinary skill in the art as to how determine, without undue experimentation, such compositions or method of producing said compositions. One of skill in the art would have to locate, *de novo*, active agents for said compositions and method of producing said composition as required by the instant claims.

Given the lack of guidance contained in the specification and the unpredictability for making and using the compositions and method of production, one of skill in the art could not make or use the broadly claimed invention without undue experimentation. In view of the lack of guidance contained in the specification and the unpredictability for the production of such composition and the composition, one skilled in the art could not make or use the broadly claimed invention without undue experimentation.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ja-Na Hines whose telephone number is 703-305-0487. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on 703-308-3909. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Ja-Na Hines 
December 1, 2003


MARK NAVARRO
PRIMARY EXAMINER